ARTICLE V.I. SMALL WIND ENERGY SYSTEMS

Sec. 53-146. Purpose and intent.

The purpose of this article is to regulate the placement, construction and modification of small wind energy systems while promoting the safe, effective and efficient use of such systems.
(Ord. No. 2007-5, § 1, 11-5-2007)

Sec. 53-147. Definitions.

[The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:]
Hybrid system: An energy system that uses more than one technology to produce energy or work (for example a wind-solar system).
Small wind energy system: A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics which will be used primarily to reduce on-site consumption of utility power.
System height: With regard to a small wind energy system, the tower height plus the blade length.
Tower: With regard to the small wind energy system, the structure on which the small wind energy system is mounted.
Tower height: With regard to the small wind energy system, the height above grade of the fixed portion of the tower, excluding the wind turbine itself.
Turbine: The parts of the small wind energy system including the blades, generator and tail.
(Ord. No. 2007-5, § 1, 11-5-2007)

Sec. 53-148. Applicability.

The requirements set forth in this division shall govern the siting of small wind energy systems used to generate electricity or perform work which may be connected to the utility grid pursuant to the Virginia's Net Metering Laws (Virginia Code § 56-594), serve as an independent source of energy, or serve in a hybrid system.
(Ord. No. 2007-5, § 1, 11-5-2007)

Sec. 53-149. Siting requirements.

The requirements for siting and construction of all small wind energy systems regulated by this article shall include the following:
(1) Small wind turbines must have a certification of approval under the Emerging Technologies Program of the California Energy Commission or any other small wind certification program recognized by the American Wind Energy Association.
(2) Small wind energy towers shall maintain a galvanized steel finish, unless Federal Aviation Administration ("FAA") standards require otherwise, or if the owner is attempting to conform the tower to the surrounding environment and architecture, in which case it may be painted to reduce visual obtrusiveness. The zoning authority may require a photograph of a small wind energy system of the same model that is the subject of the landowner's application adjacent to a building or some other object illustrating scale (e.g., manufacturer's photograph).
(3) Small wind energy systems shall not be artificially lighted unless required by the FAA or appropriate authority.

(4) No tower shall have any sign, writing, or picture that may be construed as advertising.
(5) Small wind energy systems shall comply with provisions of Halifax County Code Chapter 17, Article III, Noise.
(6) The applicant shall provide evidence that the proposed height of the small wind energy system tower does not exceed the height recommended by the manufacturer or distributor of the system.
(7) The applicant shall certify that they will comply with the utility notification requirements contained in the Virginia Net Energy Metering Law and accompanying regulations (20 VAC 5-315-30), unless the applicant intends, and so states on the application, that the small wind energy system will not be connected to the electricity grid.
(8) The applicant will provide information demonstrating that the small wind energy system will be used primarily to reduce on-site consumption of electricity. Whether or not the applicant is participating in the net energy metering program, the applicant will be required to meet the liability insurance coverage requirements set forth in 20 VAC 5-315-60.
(9) The minimum distance between the ground and any protruding blades utilized on a small wind energy system shall be 15 feet, as measured at the lowest point of the arc of the blades. The lowest point of the arc of the blade shall also be ten feet above the height of any structure within 150 feet of the base. The supporting tower shall also be enclosed with a six-foot tall fence, and the base of the tower shall not be climbable for a distance of 12 feet.
(10) The small wind energy system generators and alternators should be constructed so as to prevent the emission of radio and television signals. The applicant should correct any signal disturbance that is identified within 90 days.
(Ord. No. 2007-5, § 1, 11-5-2007)

Sec. 53-150. Federal and state requirements.
(a) *Compliance with Uniform Statewide Building Code:* Building permit applications for small wind energy systems shall be accompanied by standard drawings of the wind turbine structure, including the tower, base, and footings. An engineering analysis of the tower showing compliance with the Uniform Statewide Building Code and certified by a licensed professional engineer shall also be submitted. This analysis may be supplied by the manufacturer. Wet stamps shall not be required.
(b) *Compliance with FAA Regulations:* Small wind energy systems must comply with applicable regulations of the FAA, including any necessary approvals for installations close to airports.
(c) *Compliance with National Electric Code:* Building permit applications for small wind energy systems shall be accompanied by a line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the National Electrical Code. This information may be supplied by the manufacturer.
(d) *Compliance with regulations governing energy net metering:* Small wind energy systems connected to the utility grid must comply with Virginia Administrative Code 20 VAC 5-315: Regulations Governing Net Energy Metering, if applicable.
(Ord. No. 2007-5, § 1, 11-5-2007)

Sec. 53-151. Setbacks.
The small wind energy system shall be set back a distance at least equal to 110 percent of the height of the tower plus the blade length from all adjacent property lines and a distance equal at

least to 150 percent of the tower height plus blade length from any dwelling inhabited by humans on neighboring property and from overhead power lines. These setbacks may be reduced by notarized consent of the owner of the property on which the requested small wind energy system is to be erected and the adjacent landowner whose property line or dwelling falls within the specified distance. Also, a recorded deed shall provide an easement equal to 150 percent of the tower height plus the blade length around the tower and the area within the easement shall be designated for no other use. Small wind energy systems shall meet all setback requirements for primary structures for the zoning district in which the small wind energy system is located in addition to the requirements set forth above. Additionally, no portion of the small wind energy system, including guy wire anchors, may extend closer than ten feet to the property line.
(Ord. No. 2007-5, § 1, 11-5-2007)

Sec. 53-152. Removal of defective or abandoned small wind energy systems.
Any small wind energy system found to be unsafe by the building official shall be repaired by the owner to meet federal, state and local safety standards or removed within six months. If any small wind energy system is not operated for a continuous period of 12 months, the county will notify the landowner by registered mail and provide 45 days for a response. In such a response, the landowner shall set forth reasons for the operational difficulty and provide a reasonable timetable for corrective action. If the county deems the timetable for corrective action as unreasonable, it must notify the landowner and such landowner shall remove the turbine within 120 days of receipt of notice from the county.
(Ord. No. 2007-5, § 1, 11-5-2007)
Secs. 53-153--53-173. Reserved.